ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

Invitation to a Talk

Dipl.-Ing. Alexander Söllinger, BSc

University of Klagenfurt

"Introduction to adapted Wasserstein distances and their application on Stochastic Differential Equations"

V.1.27 | Wednesday, 5 March 2025 | 1:00 p.m.

Abstract

First, a short introduction to Optimal Transport will be given, with the example of monotone rearrangement as a one-dimensional optimizer. Then, a possible application in financial models will be discussed, along with an example demonstrating the insufficiency of the regular Wasserstein distance for such applications. The adapted Wasserstein distance will then be introduced to address the issues in the example, and an optimizer for this adapted measure transport problem between the laws of two solutions of SDEs driven by a Brownian motion will be presented.

Michaela Hitz and the Department of Statistics look forward to seeing you at the talk!